## FINAL COMPREHENSIVE PROGRESS REPORT

## (Compost Grant Final Report)

05/01/2003 through 11/30/2006

Re: NA03NMF4270111

We incorporate by reference our prior reports.

Nothing has happened under the grant since I came on board in May 2006.

My predecessor, Duff Mitchell, advises that nothing has happened under the grant since October 2005 (or maybe even an earlier date).

All accomplishments, achievements, milestones etc. were previously reported.

The reason for no activity under the grant is because our lead person has suffered grievous family losses, including the death of his youngest daughter and, more recently, his son's foot was crushed and mangled, leading to its amputation, at sea.

As for the future, it looks very bright. Now that we know how to produce a good, organically certified product, we are in the process of establishing a viable logistics and marketing arrangement.

## Saltonstall-Kennedy Grant Semi-Annual Progress Report

Economic and Resourceful Utilization of the Seafood Processing Waste Stream: Discards, Underutilized Species, Byproducts and Carcasses through Conversion into High Value Organic Composts on an Industrial Scale Project.

A. AWARD NUMBER: NA03NMF4270111

B. AMOUNT OF GRANT: federal \$180,634.00 matching \$180,633.00, total \$361,267.00

C. PROJECT TITLE: Economic and Resourceful Utilization of the Seafood Processing Waste Stream: Discards, Underutilized Species, Byproducts and Carcasses through Conversion into High Value Organic Composts on an Industrial Scale Project.

D. GRANTEE: KAKE FOODS, INC.

E. AWARD PERIOD: From 5-1-2003 to 10-31-2004 extended to 11-30-06

F. PERIOD COVERED BY THIS REPORT: 11-30-05 to 4-30-06

- G. Summary of Progress and expenditures to date:
  - 1. Work Accomplishments:
    - a. Describe tasks scheduled this period from proposal.

The following are the milestones chart for the entire project:

- 1. Site Design and Development.
  - Site is located where it will not have water runoff into local streams and that the soil is stable and capable of being a solid bed for compost operations. Selected site is sufficiently rocked to ensure solid bed. Site is located near water transportation hub for incoming supplies and outgoing freight. Site is on road for truck delivery of seafood nitrogenous materials.

Timeframe: Pre-award.

2. Infrastructure placement.

Selection and procurement of key equipment after thorough research of compost equipment that is best suited for Southeast Alaska. Perform all logistical requirements to have non-local equipment and supplies moved to the compost site.

Timeframe: Pre-award.

3. Composting operations to industry standards.

Begin composting operations to test production to begin to dial in optimum quality formula. Begin mass producing compost to known industry specifications. Obtain independent third party testing of composted product.

Timeframe: Testing:

4. Fine tuning composting operations to maximize compost times and to maximize quality in fair and inclement weather.

Finalize optimum formula to ensure that product is made consistently in all weather conditions.

Timeframe: Fall 2002, Winter 2002 (1st and 2<sup>nd</sup> guarter).

5. Organic certification.

Submit product for organic certification.

Have compost site and materials inspected by one of the organic compost certification regimens.

Timeframe: Winter 2002, Spring 2003 (2<sup>nd</sup> and 3<sup>rd</sup> quarter).

6. Bagging operations and fine-tuning bagging and palletizing operations to industry standard.

Begin bagging and palletizing operations of stored and covered compost material.

Timeframe: Winter 2002, Spring 2003 (2<sup>nd</sup> and 3<sup>rd</sup> quarter).

7. Marketing and sales operations to develop local and regional customers for Alaskan organic compost.

Submit organic certification, nutrient content, packaging and bag cover to known buvers.

Explore custom packaging for known brands based on quality determined in previous milestones.

Finalize outbound freight rates for quantities to ship to various customers. Finalize sales price based on quality and market conditions and consummate sales.

Timeframe: Fall 2002, Winter 2002, Spring 2003, Summer 2003, Fall 2003, Winter 2003, Spring 2004. (1<sup>st</sup> through 6<sup>th</sup> quarters).

8. Final financial evaluation of the project (Note that financial analysis will be conducted throughout the process).

Prepare final accounting report and financial statement of grant.

Prepare detailed final report for NMFS and the Alaska Marine Advisory Service.

Timeframe: Spring 2004 (6<sup>th</sup> guarter).

b. Describe tasks accomplished this period.

The following are the milestones accomplished and or worked on during this period:

1. Site Design and Development.

Site is located where it will not have water runoff into local streams and that the soil is stable and capable of being a solid bed for compost operations. Selected site is sufficiently rocked to ensure solid bed. Site is located near water transportation hub for incoming supplies and outgoing freight. Site is on road for truck delivery of seafood nitrogenous materials.

Timeframe: Pre-award.

This milestone is successfully completed. No additional activity this period

## 2. Infrastructure placement.

Selection and procurement of key equipment after thorough research of compost equipment that is best suited for Southeast Alaska. Perform all logistical requirements to have non-local equipment and supplies moved to the compost site.

Timeframe: Pre-award.

This milestone is successfully completed. No additional activity this period

3. Composting operations to industry standards.

Begin composting operations to test production to begin to dial in optimum quality formula. Begin mass producing compost to known industry specifications. Obtain independent third party testing of composted product.

Timeframe: Testing: (1st quarter).

This milestone is successfully completed. No additional activity this period

4. Fine tuning composting operations to maximize compost times and to maximize quality in fair and inclement weather.

Finalize optimum formula to ensure that product is made consistently in all weather conditions.

Timeframe: 1st and 2<sup>nd</sup> quarter.

This milestone has been completed. However, due to no funding available for tarps, some compost has degenerated. We are evaluating this issue to determine how best to handle this degradation.

5.Organic certification.

Submit product for organic certification.

Have compost site and materials inspected by one of the organic compost certification regimens.

Timeframe:2<sup>nd</sup> and 3<sup>rd</sup> quarter.

We have successfully met this milestone. No additional activity this period

6. Bagging operations and fine-tuning bagging and palletizing operations to industry standard.

Begin bagging and palletizing operations of stored and covered compost material. Timeframe: 2<sup>nd</sup> and 3<sup>rd</sup> quarter

We have successfully met this milestone. We do not have a generator anymore so bagging is difficult. No additional activity this period.

7. Marketing and sales operations to develop local and regional customers for Alaskan organic compost.

Submit organic certification, nutrient content, packaging and bag cover to known buyers. Explore custom packaging for known brands based on quality determined in previous milestones.

Finalize outbound freight rates for quantities to ship to various customers.

Finalize sales price based on quality and market conditions and consummate sales.

Timeframe: Fall 2002, Winter 2002, Spring 2003, Summer 2003, Fall 2003, Winter 2003, Spring 2004. (1<sup>st</sup> through 6<sup>th</sup> quarters).

We have made little progress in this activity. We are in the discussion phase of using our compost to seal or cap mining waste with local mines. Unfortunately, our freight rates have skyrocketed with the increase of fuel costs.

8. Final financial evaluation of the project (Note that financial analysis will be conducted throughout the process).

Prepare final accounting report and financial statement of grant. No activity to report in this period. Final accounting report and financial statement will be prepared upon completion of the grant.

Prepare detailed final report for NMFS and the Alaska Marine Advisory Service.

No additional activity to report in this period. We have asked for a one year extension to finish this grant with success. We have recently sold our seafood plant and a new owner will be operating the plant in 2006. We have agreements to work with this new owner to revitalize the waste component of our compost business.

Timeframe: Fall 2006.

This milestone, financial evaluation, is ongoing and will continue throughout the project.

Our initial financial analysis indicates that the compost operation has a high chance of becoming profitable.

c. Explain special problems, differences between scheduled and accomplished work.

We have recently sold the Kake Foods Inc. seafood complex. However, we are working with the new owner who is interested in supporting this endeavor. We will work to obtain agreements to continue our compost operations.

We had a problem of bag deterioration. Some of the bags that we had made did not hold up to weather as well as they should have. The labels became faded and this caused some negative consumer feedback. Although we cannot immediately fix the situation, we will correct this when we order bags in the future.

Further, we are not getting close cooperation with the local barge line. We were unable to sell several potentially large orders because the freight cost made the sale prohibitive. The increase in fuel cost has made it difficult to market and get committed orders.

Signature

Karl Lehr, Project Investigator

Date 6-24-06